

AMENDMENTS TO THE CLAIMS

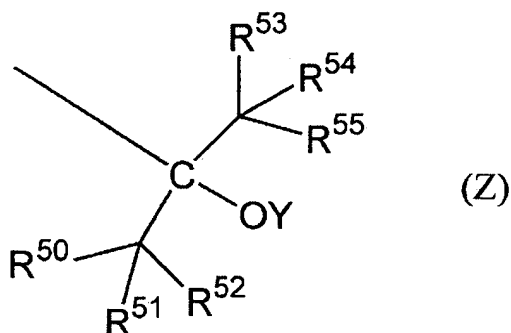
This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A positive resist composition comprising:

(A) a resin which comprises a repeating unit having at least two groups represented by the following general formula (Z) and at least one ~~kind of repeating units~~ unit selected from the group consisting of repeating units represented by the following general formulae (II) to ~~(VI)~~ (V), the resin increasing the solubility in an alkaline developing solution by the action of an acid; and

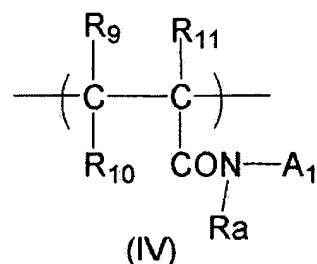
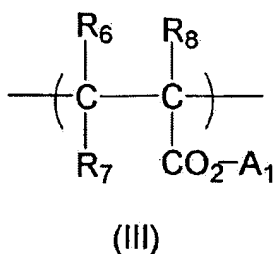
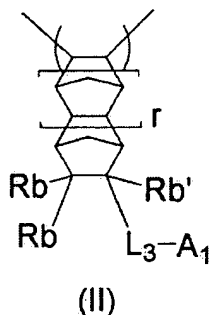
(B) at least one compound which generates an acid by the action of actinic rays or a radiation:



in general formula (Z),

R^{50} to R^{55} each independently ~~represent~~ represents a hydrogen atom, a fluorine atom, or an alkyl group, provided that at least one of R^{50} to R^{55} is either a fluorine atom or an alkyl group in which at least one of the hydrogen atoms has been replaced by a fluorine atom, and

Y's each independently represent a hydrogen atom or an organic group;



in general formula (II),

Rb and Rb' each independently ~~represent~~ represents a hydrogen atom, a halogen atom, or an organic group,

L₃ represents a single bond or a bivalent connecting group, A₁ represents a partial structure represented by the following general formula (A₁), and

r represents 0 or 1;

in general formula (III),

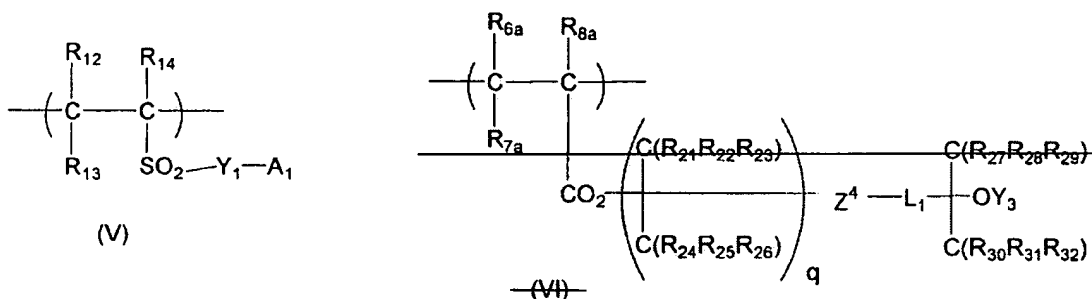
R₆ to R₈ each independently ~~represent~~ represents a hydrogen atom, a fluorine atom, a chlorine atom, a cyano group, or an alkyl group in which at least one of the hydrogen atoms has been replaced by a fluorine atom, provided that at least one of R₆ to R₈ is not a hydrogen atom, and

A₁ represents a partial structure represented by the following general formula (A₁);

in general formula (IV),

R₉ to R₁₁ each independently ~~represent~~ represents a hydrogen atom, a fluorine atom, a chlorine atom, a cyano group, or an alkyl group in which at least one of the hydrogen atoms has been replaced by a fluorine atom, provided that at least one of R₉ to R₁₁ is not a hydrogen atom,

A₁ represents a partial structure represented by the following general formula (A₁);



R₁₂ to R₁₄ each independently ~~represent~~ represents a hydrogen atom, a fluorine atom, a chlorine atom, a cyano group, or an alkyl group in which at least one of the hydrogen atoms has been replaced by a fluorine atom,

A₁ represents a partial structure represented by the following general formula (A₁);

~~R_{6a} to R_{8a} each independently represent a hydrogen atom, a fluorine atom, a chlorine atom, a cyano group, or an alkyl group in which at least one of the hydrogen atoms has been replaced by a fluorine atom, provided that at least one of R_{6a} to R_{8a} is not a hydrogen atom,~~

~~R₂₁ to R₂₆ each independently represent a hydrogen atom, a fluorine atom, or an alkyl group, provided that at least one of R₂₁ to R₂₆ is a fluorine atom,~~

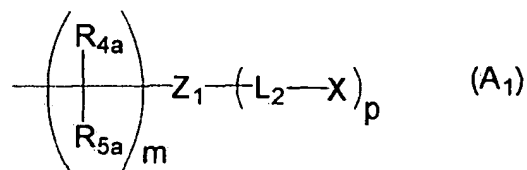
~~R₂₇ to R₃₂ each independently represent a hydrogen atom, a fluorine atom, or an alkyl group, provided that at least one of R₂₇ to R₃₂ is a fluorine atom,~~

~~Z₄ represents a phenylene group, a cyclohexylene group, an adamantane residue, or a norbornane residue,~~

~~Y₃ represents a hydrogen atom or an organic group,~~

~~L₁ represents a single bond or a bivalent connecting group, and~~

~~q represents 0 or 1; and~~



in general formula (A₁),

R_{4a} and R_{5a} each independently ~~represent~~ represents an alkyl group,

Z₁ represents an alicyclic hydrocarbon group having a valence of p+1,

L₂ represents a single bond or a ~~bivalent connecting~~ methylene group,

X represents a hydroxy group, a cyano group, an alkoxy group, or an alkyl group,

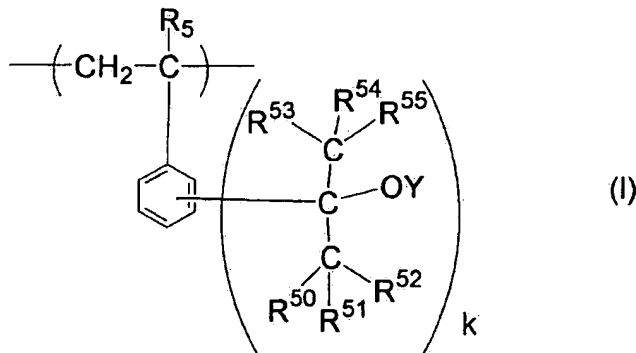
provided that at least one of the X's is not an alkyl group,

when two or more L₂'s and two or more X's are present in the partial structure, the L₂'s and the X's each may be the same or different,

m represents 0 or 1, and

p represents an integer of 1 to 4.

2. (original): The positive resist composition of claim 1, wherein the repeating units having at least two groups represented by general formula (Z) are repeating units represented by the following general formula (I):



in general formula (I),

R_5 represents a hydrogen atom, a halogen atom, a cyano group, or an alkyl group,

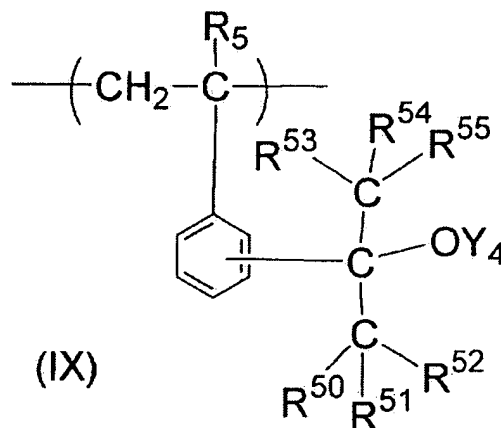
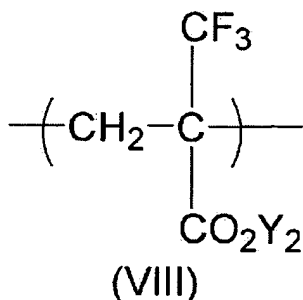
R^{50} 's to R^{55} 's each independently represent a hydrogen atom, a fluorine atom, or an alkyl group, provided that at least one of R^{50} to R^{55} is either a fluorine atom or an alkyl group in which at least one of the hydrogen atoms has been replaced by a fluorine atom,

Y 's each independently represent a hydrogen atom or an organic group, and

k represents an integer of $2 \leq k \leq 5$.

3. (original): The positive resist composition of claim 1, wherein at least one X in the formula (A_1) is a group having a hydroxy group.

4. (currently amended): The positive resist composition of claim 1, wherein the resin (A) further contains at least one of repeating units represented by the following formula (VIII) and repeating units represented by the following formula (IX):



in general formula (VIII),

Y₂ represents a hydrogen atom or an organic group; and

in general formula (IX),

R₅ represents a hydrogen atom, a halogen atom, a cyano group, or an alkyl group,

R⁵⁰ to R⁵⁵ each independently ~~represent~~represents a hydrogen atom, a fluorine atom, or an alkyl group, provided that at least one of R⁵⁰ to R⁵⁵ is a fluorine atom or an alkyl group in which at least one of the hydrogen atoms has been replaced by a fluorine atom, and

Y₄ represents a hydrogen atom or an organic group.

5. (original): The positive resist composition as described in claim 1, wherein Z₁ in the formula (A₁) is an adamantyl group or a norbornane residue.

6. (original): The positive resist composition as described in claim 2 wherein k in formula (I) is 2.
7. (original): The positive resist composition as described in claim 1 wherein Rb' in formula (II), R₈ in formula (III), or R₁₁ in formula (IV) is a trifluoromethyl group.
8. (original): The positive resist composition as described in claim 1 which further contains (X) a non-polymeric dissolution inhibitor.
9. (currently amended): The positive resist composition as described in claim 1, ~~above~~ wherein the compound (B) comprises (B1) at least one compound which generates an organic sulfonic acid by the action of actinic rays or a radiation.
10. (currently amended): The positive resist composition as described in claim 9, ~~above~~ wherein the compound (B1) comprises at least one compound which generates an organic sulfonic acid containing at least one fluorine atom by the action of actinic rays or a radiation and at least one compound which generates an organic sulfonic acid containing no fluorine atom by the action of actinic rays or a radiation.
11. (currently amended): The positive resist composition as described in claim 9, ~~above~~ wherein the compound (B) further contains (B2) a compound which generates a carboxylic acid by the action of actinic rays or a radiation.

13. (currently amended): The positive resist composition as described in claim 1,
above which further contains (D) a surfactant.

developing the resultant coating.

$$\begin{array}{c}
 \text{R}_{6a} \quad \text{R}_{8a} \\
 | \quad | \\
 \text{---} \left(\text{C} \text{---} \text{C} \right) \text{---} \\
 | \quad | \\
 \text{R}_{7a} \quad | \\
 \quad \text{CO}_2 \left(\begin{array}{c} \text{C}(\text{R}_{21}\text{R}_{22}\text{R}_{23}) \\ | \\ \text{C}(\text{R}_{24}\text{R}_{25}\text{R}_{26}) \end{array} \right)_q \quad \text{Z}^4 \text{---} \text{L}_1 \text{---} \begin{array}{c} \text{C}(\text{R}_{27}\text{R}_{28}\text{R}_{29}) \\ | \\ \text{OY}_3 \\ | \\ \text{C}(\text{R}_{30}\text{R}_{31}\text{R}_{32}) \end{array}
 \end{array}
 \quad \text{(VI)}$$

in general formula (VI),

R_{6a} to R_{8a} each independently represents a hydrogen atom, a fluorine atom, a chlorine atom, a cyano group, or an alkyl group in which at least one of the hydrogen atoms has been replaced by a fluorine atom, provided that at least one of R_{6a} to R_{8a} is not a hydrogen atom,

R_{21} to R_{26} each independently represents a hydrogen atom, a fluorine atom, or an alkyl group, provided that at least one of R_{21} to R_{26} is a fluorine atom,

R_{27} to R_{32} each independently represents a hydrogen atom, a fluorine atom, or an alkyl group, provided that at least one of R_{27} to R_{32} is a fluorine atom,

Z^4 represents a phenylene group, a cyclohexylene group, an adamantane residue, or a norbornane residue,

Y_3 represents a hydrogen atom or an organic group,

L_1 represents a single bond or a bivalent connecting group, and

q represents 0 or 1.